RURAL INFORMATION NETWORK

TBLA 96-386

Decided July 19, 1999

Appeal from a decision of the District Manager, Eugene District Office, Bureau of Land Management, denying a protest of the Decision Record permitting sample tree felling for timber cruises. OR-090-EA-96-6.

Affirmed.

1. Environmental Quality: Environmental
Statements—National Environmental Policy Act of 1969:
Environmental Statements—Timber Sales and Disposals

The party challenging a BIM decision has the burden of showing by objective proof that the determination was premised on a clear error of law or a demonstrable error of fact, or that the analysis failed to consider a substantial environmental question of material significance to the action for which the analysis was prepared. Mere differences of opinion or disagreements do not suffice to establish that BIM's analysis is inadequate.

APPEARANCES: John Bianco, Creswell, Oregon, for the Rural Information Network; Judy Ellen Nelson, District Manager, Eugene, Oregon, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE TERRY

The Rural Information Network (RIN or Appellant) has appealed from the April 22, 1996, decision of the District Manager, Eugene District Office, Bureau of Land Management (BLM), Eugene, Oregon, denying its protest of BLM's March 20, 1996, Decision Record implementing sampling and felling procedures to be used in timber cruises throughout the district. 1/ The Decision Record is supported by an environmental assessment, OR-090-EA-96-6 (EA), signed on January 18, 1996, and a Finding of No Significant

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^{1/} As used by BLM, a timber "cruise" is "[a] field examination of a forest area to locate timber and estimate its quantity by species, products, size, quality, and/or other characteristics." <u>BLM Manual</u>, Subpart 5300, "Glossary of Terms."

Impact (FONSI) issued on January 25, 1996. The EA examines procedures to be used by BLM for assessing forest stands to evaluate timber available for timber sales and land exchanges, among other projects.

The District Manager's decision authorizes trees to be felled and cut into lengths for direct measurement of volume and evaluation of timber condition. (EA at 2.) For relatively homogenous stands which are undergoing silvicultural thinning, "trees may be felled to construct a volume table in which the timber volume of sample trees is related to the tree diameter." Id. at 2.

According to the EA, "the number of trees felled would be dependent on site and stand conditions, especially the expected amount of defect in the timber." The EA explains:

In relatively homogenous stands of young timber with little defect, few if any trees would need to be felled. Also, small stands may be entirely sampled (i.e., every merchantable tree would be directly measured), and therefore, no trees would need to be felled. In large and heterogeneous stands, especially those with much timber defect, 25 or more trees may need to be felled in the proposed project area. Trees felled would be scattered widely and randomly over the proposed project area, generally at a density of less than one tree per acre. Felling would avoid trees with obvious signs of wildlife use (e.g., trees with nests or cavities) to the extent possible. * * * The removal or retention of the felled trees would be addressed in a project-specific EA.

<u>Id.</u> In selecting trees to be felled, BLM intends to be guided by the "3-P" sampling method, which contemplates that "the probability of selecting any tree in the stand is proportional to a predicted volume of timber." (EA at 1.)

The EA is tiered to two land use planning documents: the Northwest Forest Plan (April 1994) (NFP) $\underline{2}/$ and the June 1995 Eugene District Record of Decision and Resource Management Plan (RMP), which incorporates

^{2/} The "Northwest Forest Plan" is the term generally applied to a group of documents relating to the <u>Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.</u> These documents consist of the ROD in which the Secretary of Agriculture and the Secretary of the Interior jointly amended the planning documents of 19 National Forests and 7 BLM Management Districts to adopt a comprehensive ecosystem management strategy, and an Attachment to the ROD entitled "Standards and Guidelines for Management of Habitat of Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl." <u>See In re North Murphy Timber Sale</u>, 146 IBLA 305, 308 n.3 (1998).

planning decisions set forth in the NFP. The RMP addresses resource management on 318,039 acres of Federal land and 1,299 acres of reserved mineral estate administered by BLM in the Eugene District. (RMP at 3.) The RMP is an attempt to respond to both ecological and economic needs, of which two primary ones are "the need for forest habitat and the need for forest products." (RMP at 4.) According to the RMP: "The Congressionally directed purposes for managing * * * BLM administered lands include both conserving the ecosystems upon which species depend and, at the same time, providing raw materials and other resources that are needed to sustain the health and economic well-being of the people of this country." Id.

Based upon land use allocations established in the NFP, the RMP establishes the following land use distributions for the District: riparian reserves, late-successional reserves, adaptive management areas, and matrix areas. The "matrix" is divided into two sub-classifications: connectivity/diversity blocks and general forest management areas. 3/ The purpose of classifying the land into these categories is to encourage and advance the ecological responsibility BIM has to preserve and maintain late-successional and old growth forests, as well as to further its charge to also provide for the region's economic and social needs. In describing how BIM plans to do both, the RMP notes: "To balance these sometimes conflicting purposes, we adopted * * * [a management plan] that will both

<u>Adaptive management areas</u> are "[1] and scape units designated for development and testing of technical and social approaches to achieving desired ecological, economic, and other social objectives."

General forest management areas are "[f]orest land managed on a regeneration harvest cycle of 60-100 years. A biological legacy of 6 to 8 green trees per acre would be retained to assure forest health. Commercial thinning would be applied where practicable and where research indicates there would be gains in timber production."

<u>Late-successional forests</u> are "[f]orest seral stages that include mature and old growth age classes."

<u>Matrix</u> lands are "Federal land outside of reserves and special management areas that will be available for timber harvest at varying levels."

<u>Riparian management areas</u> are "allocated in the plan primarily to protect the riparian and/or streamside zone." Land use in riparian areas is governed by the land use allocation in which they are located. Therefore, riparian areas located in old-growth forest will be managed differently from riparian areas located in general forest management areas, although all management actions in riparian reserves are guided by Aquatic Conservation Strategy objectives. <u>See</u> RMP at 23-24.

<u>Connectivity/diversity blocks</u> are not defined; however, from the context one can infer that they are areas in which late-successional forest structures and earlier seral stages of forest are intermixed. They are to be managed so as to "promote development of late-successional forest structure within a longer rotation, while providing an output of merchantable timber and maintaining forest health and productivity." (RMP at 202.)

 $[\]underline{3}/$ The RMP Glossary (RMP at 119-33) defines these classifications as follows:

maintain the late-successional and old growth forest ecosystem and provide a predictable and sustainable supply of timber, recreational opportunities, and other resources [from the remaining land use allocations]." Id.

The RMP indicates that there are 132,550 acres of mapped and 3,904 acres of unmapped late successional reserves in the Eugene District. These lands have no scheduled timber harvests, and, by the terms of the EA, are not subject to cruise sampling methods. (EA at 2.) Areas of "critical environmental concern" (CEC areas), are also excluded from tree felling procedures adopted by the Decision Record. The CEC areas encompass 3,000 acres of administratively withdrawn areas having "special resource values," including habitat supporting threatened or endangered plants or animals (1,821 acres), the Relic Forest Islands (575 acres), some riparian reserves (1,158 acres), unmapped late-successional reserves for spotted owls (274 acres), and 187 acres of fragile sites. (RMP at 23.)

Appellant's protest of the Decision Record was directed to the District Manager's approval of Alternative A of the EA. Alternative A permits timber cruisers to fell trees in proposed project areas throughout the Eugene District "primarily within the `matrix' and `adaptive management area' land use allocations," with the additional possibility of felling some trees in riparian areas. (EA at 2.) 4/

The concept of the "adaptive management area" was devised as part of the NFP, which established 10 such areas across the range of the northern spotted owl. According to the NFP, "[e]ach area has a different emphasis to its prescription, such as maximizing the amount of late-successional forests, improving riparian conditions through silvicultural treatments, and maintaining a predictable flow of harvestable timber and other forest products." (NFP at 6.) The only adaptive management area within the Eugene District is the Central Cascade Adaptive Management Area (CCAMA). Its central focus is to "[c]ontribute substantially to the achievement of * * * [NFP] objectives, including provision of well-distributed late-successional habitat outside reserves; retention of key structural elements of latesuccessional forest on lands subjected to regeneration harvest; restoration and protection of riparian zones; and provision of a stable timber supply." (RMP at 32.) 5/ The main objective for the CCAMA, which encompasses 16,200 acres, is "to develop and test new management approaches to integrate and achieve ecological and economic health and other social objectives." The CCAMA has a short-term (3- to 5-year) timber sale plan

^{4/} In the Decision Record, BLM clarified that timber felling in riparian areas would be "limited to homogeneous stands of young timber which need density management treatment to attain Aquatic Conservation Strategy objectives." BLM avers that, as the EA proposes most tree felling in large, heterogenous stands that have much timber defect, "few if any trees [in riparian areas] would need to be felled * * *." (Decision Record at 2.)
5/ Regeneration harvest is defined in the glossary as "[timber] harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished." (RMP at 127.)

and long-term yield objectives. It also contains mapped and unmapped late successional reserves, as well as riparian areas, which are to be managed in accordance with objectives for those areas. (RMP at 32-34.)

According to the RMP, the matrix includes both connectivity/diversity blocks (23,800 acres) and general forest management areas (37,860 acres), for a total of 61,660 acres. (RMP at 34.) The RMP establishes that these categories of lands are the most available for timber harvest, with the exception of late-successional forest patches within the connectivity blocks. From these lands, BLM is authorized to sell 36 million board feet annually in order to "provide a sustainable supply of timber and other forest products." (RMP at 84-85.) Other objectives for timber resources in these areas are to

- o [m]anage developing stands on available lands to promote tree survival and growth and to achieve a balance between wood volume production, quality of wood, and timber value at harvest;
- o [m]anage timber stands to reduce the risk of stand loss from fires, animals, insects, and diseases; [and to]
- o [p]rovide for salvage harvest of timber killed or damaged by events such as wildfire, windstorms, insects, or disease, consistent with management objectives for other resources.

(RMP at 84.)

The EA lists three environmental consequences of cruise methods that require sample cutting. First, the EA recognizes the direct mortality of individual trees scattered over proposed project areas. According to the EA, these trees would either be removed as part of the timber harvest, or reserved as coarse woody debris. BLM avers that the environmental consequence of either removal or retention of felled trees would be addressed as part of a project-specific EA. (EA at 2.) Secondly, the EA acknowledges that tree felling could result in direct damage to adjacent vegetation and direct disturbance of the surface litter layer in the immediate vicinity of the tree felled. The EA reports that this could result in temporary disturbance to wildlife in the immediate location. BLM proposes to address the effects to threatened or endangered species in the fiscal year Biological Assessment, but notes that "[i]mpacts to sensitive plant species could occur, especially if falling occurs during the growing season and before completion of botanical surveys in proposed project areas." But, BIM adds, "the effect on plant populations would likely be negligible because of the minor and localized nature of any direct impacts and the highly dispersed distribution of the tree falling." (EA at 2-3.) Thirdly, the EA concedes that tree felling could indirectly contribute to an overhead canopy gap, but BIM concludes that felling will be distributed over so wide an area

that "the direct, indirect, and cumulative effects would be largely indistinguishable from the effect of natural, individual tree-falls and canopy gap formation." (EA at 3.)

The EA also briefly examined a "no action alternative" (Alternative B), in which cruises would be conducted without felling trees. Id. BLM recognized that Alternative B would have fewer consequences for the environment prior to initiation of specific timber projects, but concluded that the result of not felling sample trees would "likely result in lower accuracy in timber cruises, which could reduce the confidence of timber purchasers in the BLM appraisal of timber value and result in lower bids for timber offered for sale." The EA concluded: "Less accurate timber cruises could also have a long-term effect of impairing the ability of BLM to plan the production of a sustainable supply of lumber." Id.

In its Statement of Reasons on appeal (SOR), RIN avers that it is a "coalition of grass-roots environmental and human rights organizations" in rural Lane County, Oregon. RIN alleges that its members "use and enjoy the public lands of the Eugene BLM District and are affected by decisions pertaining to the management of these lands." (SOR at 1.) RIN objects to the actions proposed by the Decision Record on the following bases: (1) The current state of forestry science supports a finding that trees do not need to be felled in order to accurately measure the quality of timber stands; (2) tree felling prior to completion of site specific environmental, botanical, and wildlife assessments constitutes "an irretrievable commitment of resources before a formal decision to proceed with an action," and could result in "the taking of listed species of plants and animals;" and (3) timber cruisers and "fallers" are not sufficiently trained to decide which trees are or are not wildlife habitat, and biologists should select or review trees to be cut. (SOR at 1-2.)

In her Response to Appellant's SOR, the BIM District Manager rejects RIN's assertion that felling trees is not necessary to ascertain the extent of defect across a tree population, claiming that the rationale for felling selected trees is adequately justified in the Decision Record. With regard to RIN's objection to felling trees prior to development of a site-specific EA, BIM responds that "[t]he falling of a limited and highly scattered sample of trees does not prejudice the consideration of any alternative analyzed in a proposed timber sale, including a no action alternative." (BIM Response at 2.) Concerning Appellant's protest of BIM's proposal to fell trees for sampling purposes prior to completion of site-specific biological assessments, BIM states:

The BIM's response to the Appellant's protest addressed this issue, explaining that any effect of tree falling for timber cruises on threatened [or] endangered * * * species will be addressed in the fiscal year Biological Assessment for proposed projects. If it is determined that the proposed action "may affect" a threatened or endangered species, no falling will occur on the affected area until the consultation process is completed.

Falling would be modified if necessary to comply with the subsequent Biological Opinion. The appellant has provided no arguments in its Statement of Reasons beyond those in the original protest.

- <u>Id.</u> Finally, in answer to RIN's complaint that timber cruisers are not qualified to determine which trees are or are not wildlife habitat, BIM avers that "trees with obvious signs of wildlife use will be identified by the wildlife biologist during the project planning and design"; cruisers are, in fact, sensitive to signs of wildlife use, and "tree falling will avoid trees with obvious signs of wildlife use." BIM also notes that, with respect to this argument, Appellant has raised no new issues on appeal.
- [1] A BIM decision denying a protest of a Decision Record and FONSI will be affirmed where the Appellant fails to establish that BIM did not adequately consider matters of environmental concern. The party challenging a BIM decision has the burden of showing by objective proof that the determination was premised on a clear error of law or a demonstrable error of fact, or that the analysis failed to consider a substantial environmental question of material significance to the action for which the analysis was prepared. Mere differences of opinion or disagreements do not suffice to establish that BIM's analysis is inadequate, and provide no basis for reversal. The Ecology Center, 147 IBIA 66 (1998).

Concerning BLM's environmental responsibilities, this Board has said that

"[a] Federal agency must take a `hard look' at the environmental consequences of its proposed actions. * * * In reviewing whether BLM has taken a `hard look,'" the Board examines whether the record establishes that BLM made a careful review of environmental issues, identified relevant areas of environmental concern, and whether its final determination was reasonable.

<u>Vulcan Power Co.</u>, 143 IBLA 10 (1998). <u>See Friends of the Nestucca Coast Association</u>, 144 IBLA 341, 356-57 (1998), <u>appeal filed</u>, <u>sub nom. Coast Range Assoc. v. Shuford</u>, Civ. No. 98-819-JO (D. Or. July 7, 1998).

Timber cruises are the standard practice for evaluating the volume of timber available for sale on Federal lands. 43 C.F.R. \S 5422.1. The procedures by which timber cruises are conducted are set forth in the <u>BLM Manual</u> at Subpart 5310. Subparts 5310.02 are 5310.07 are instructive:

02. <u>Objectives</u>. The objective of BLM timber cruising is to provide accurate estimates of timber volumes and sometimes values for conducting the Bureau's forest management program.

* * * * * * * *

.07 <u>Scope and Background</u>. Timber cruising is a linchpin for several Bureau timber management activities including timber

inventory, timberland exchanges, timber sales, and timber trespass. In each case the accuracy of the timber cruise is basic to accomplishing successfully projects related to the preceding activities. The Bureau has traditionally used cruise sales, also termed lump-sum sales, as the basis for selling timber. This method of sale makes the accuracy of the cruise especially important. It is not the intent of this Manual Section to provide all that needs to be known to become a proficient timber cruiser. Cruising knowledge is acquired through training and experience (see BIM Manual Section 5300.7). This Manual Section provides some procedural guidance for maintaining uniformity between State Timber Management Programs.

It is useful to define some terms that are used by BIM to describe different types of timber cruises. The BIM Manual defines a "100% cruise" as "[a] timber cruise in which the estimate of volume, by species, is determined from size measurements taken for every tree in the area which meets established standards of merchantability." It is conducted by dividing the stand into "cruise strips" in uniform widths, and measuring every "merchantable" tree. A "sample cruise," however, only measures a portion of the trees which meet established merchantability standards in the forest or sale area. <u>BIM Manual</u>, Subpart 5300, "Glossary of Terms."

A "3P sample cruise" is "a timber cruise which canvasses the entire stand, but measures only those trees selected by use of a random number table obtained for each sale." Measurements taken on the trees sampled are extrapolated to the whole stand based on the formula "the probability that a tree becomes a part of the sample is proportional to its predicted volume." Id., Part 5310, "Timber Cruising." With regard to the number of samples needed to perform a 3P sample cruise, the Manual states:

It is best to over sample, rather than fall short of the number of sample trees needed to obtain an acceptable standard error for the cruise. Since tree populations may differ from precruise estimates, the actual number of samples may vary from the expected number. To compensate for variances in sample size, two extra sets of random numbers, one higher and one lower, should be obtained along with the original. If a 3P cruise is producing fewer than expected samples, the cruiser can shift to a set designed to give more samples and vice versa. * * * If 150 samples were estimated to be needed to obtain a satisfactory standard error, 175 should be selected, 25 systematically excluded, and 150 measured. If the 150 does not meet the standard error test, then, additional trees are available for achieving the required standard error.

<u>BIM Manual</u>, Subpart 5310.1.12.B. The BIM Manual contemplates that sample trees may be felled, bucked, and scaled. <u>BIM Manual</u> Subpart 5310.1.12.G.

As our exposition above reveals, this BLM action takes place against a backdrop of changing policy concerning how timber in the Northwest is to

be managed to further both ecological and economic interests. Neither the NFP nor the RMP, however, prohibits felling trees for sampling purposes, and this proposed action conforms to the parameters set forth in the NFP and RMP by limiting cruise sampling techniques to the matrix and adaptive use areas, which are managed with an emphasis towards timber production. Moreover, the cruise plan conforms to procedures set forth in the BIM Manual.

We now turn to the specific objections raised in Appellant's SOR. Concerning RIN's argument that "falling trees is not necessary to determine the amount of defect in a tree," RIN has not presented us with sufficient objective proof that this is the case to satisfy its burden of showing that BIM's choice to back up its timber measurement program with felling sample trees is premised on "a clear error of law or a demonstrable error of fact." RIN alleges that

[f]orestry science has devoted considerable attention to characterizing tree condition by field observation. Private foresters, and the US Forest Service, determine stand condition without destructive sampling. Tree characteristics such as general form of trunk, size and shape of branch canopy, and growth pattern provide information about the value of wood in a particular tree. Scars from past fires or damage also provide clues as to the condition of the wood. Fungus which causes defects can be detected by looking for fungal fruit bodies on the tree trunk or the ground around the tree. Swollen knots, swollen branch junctions or other bulges in the trunk indicate defects in a mature tree. An increment borer can be used to drill into a tree to check for gross defects or fungal damage without seriously injuring the tree.

(SOR at 1.) While Appellant raises questions concerning whether sampling trees by observation and other nondestructive sampling methods would be sufficient, they have not shown us how these methods can determine the extent of tree damage to the degree of accuracy of volume measurement demanded by BIM's timber management program. RIN's argument, therefore, remains in the realm of opinion.

On appeal, RIN reiterates the argument made before the District Manager that BIM should prepare a site-specific EA prior to execution of its timber cruise program. It has, however, provided no new evidence or argument on appeal to further support its allegations that the sample tree plan is so comprehensive as to "constitute an irretrievable commitment of resource before a formal decision to proceed with an action." While not stated in specific terms, at the most, the number of trees to be felled is limited to the number determined to be necessary to obtain a satisfactory standard error of measurement for a particular project area. At the least, i.e., where stands are healthy, homogenous, and the volume of lumber can be accurately determined without felling, few or no trees will be cut. As BIM contemplates scattering felled trees at a distribution of less than one

tree per acre, we must agree with BLM that this action does not rise to the level of "an irretrievable commitment of resources before a formal decision to proceed."

We next turn to Appellant's argument that BLM's decision does not comply with applicable provisions of the Endangered Species Act (ESA). Under section 7 of the ESA, as amended, 16 U.S.C. § 1536 (1994), an agency is required to consult with the U.S. Fish and Wildlife Service (FWS) to determine whether any species that is listed or proposed to be listed as threatened or endangered "may be present" in the area of a proposed action of the agency. If any such species may be present, the agency must prepare a "biological assessment" to identify any species "which is likely to be affected" by the action. Id. The Biological Assessment is the initial "information prepared by or under the direction of the Federal agency [in this case, BLM] concerning listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation [of] potential effects of the action on such species and habitat." 50 C.F.R. § 402.02. In consultation with FWS, an agency shall insure that its action is not likely to jeopardize the continued existence of any such species or result in the destruction or adverse modification of its critical habitat. 16 U.S.C. § 1536(a)(2) (1994). After this consultation is initiated, the agency and the permit applicant "shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate [16 U.S.C. § 1536(a) (2)]." 16 U.S.C. § 1536(d) (1994).

In its SOR, Appellant alleges that "[f]alling trees before site-specific botanical or wildlife assessments are completed could result in the taking of listed species of plants and animals," and that "[f]alling sample trees would impede botanical or wildlife surveys by obstructing the travel of searchers as well as directly covering evidence." (SOR at 3.)

In the April 1996 decision on appeal, BLM stated:

As discussed in the EA (pp. 2-3) and the Decision Record (p. 2), any effect of tree falling for timber cruises on threatened, endangered or proposed species will be addressed in the fiscal year Biological Assessment for proposed projects, and the falling would be modified if necessary to comply with the subsequent Biological Opinion.

(Decision at 1.) The decision further offers the following protection for listed animals:

Tree falling for timber cruises will avoid trees with obvious signs of wildlife use (e.g., trees with nests or cavities) to the extent possible. Timber cruisers and fallers are not only sufficiently trained, but are in fact expert at identifying trees with such signs as excavated cavities, naturally-decayed

cavities, and mistletoe-broom branch platforms. Nonetheless, trees with obvious signs of wildlife use will be identified by the wildlife biologist during the project planning and design, which will precede tree falling for timber cruises.

(Decision at 2.) With respect to threatened and endangered plant species, the EA acknowledges that "[i]mpacts to sensitive plant species could occur, especially if falling occurs during the growing seasons and before completion of botanical surveys in proposed project areas," and continues: "Though damage to individual plants is possible, the effect on plant populations would likely be negligible because of the minor and localized nature of any direct impacts and the highly dispersed distribution of the tree falling." In its Response to RIN's SOR, BLM again avers that "[f]alling would be modified if necessary to comply with the subsequent Biological Opinion." Id.

In its decision denying Appellant's protest, BIM avers that sample tree felling will be conducted in conjunction with fiscal year biological assessments. In its Response to Appellant's SOR, BIM again avers that any effect of tree felling for timber cruises on threatened or endangered species will be addressed "in the fiscal year Biological Assessment for proposed projects." It also states that, if it is determined that the proposed action "may affect" a threatened or endangered species, "no falling will occur on the affected area until the consultation process is completed." Finally, BIM states that "[f]alling would be modified if necessary to comply with the subsequent Biological Opinion." (BIM Response at 2.) The record therefore supports a finding that sample trees will be felled only subsequent to implementation of adequate protections for threatened and endangered species pursuant to the ESA and implementing regulations.

Accordingly, pursuant to the authority delegated to the Board by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed.

	James P. Terry Administrative Judge	
I concur:		
Gail M. Frazier Administrative Judge		

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